

Amendments to the Claims

The listing of claims below will replace all prior versions and listings of claims in the present application.

Claim Listing

1 1. (Previously Presented) A system for producing holographic stereograms
2 (holograms) on-demand by an individual customer, from source material provided by the
3 customer, comprising:

4 a data acquisition station having a data acquisition processor that receives image
5 data based on the source material and a customer-based preview processor
6 that displays a representation of the hologram for viewing by the
7 customer;

8 an image processing station having an image processor operable to generate hogel
9 data based on image data received from the data acquisition station; and

10 a printing station having a spatial light modulator for receiving the hogel data
11 from the image processor and for displaying holographic object images,
12 and having a printer for producing a master holographic stereogram;

13 wherein the data acquisition station is in data communication with the image
14 processing station and the printing station.

1 2. (Original) The system of Claim 1, wherein the data acquisition station is
2 remote from the image processing station and the printing station.

1 3. (Original) The system of Claim 1, wherein the image processing station also
2 has an operator-based preview processor operable to display a representation of the
3 hologram for viewing by an operator of the image processor.

1 4. (Original) The system of Claim 1, wherein the data acquisition station is a
2 personal computer.

1 5. (Original) The system of Claim 4, wherein the data communication is
2 accomplished via the Internet.

1 6. (Original) The system of Claim 4, wherein the data acquisition processor and
2 the customer-based preview processor execute with programming downloaded to the
3 personal computer.

1 7. (Original) The system of Claim 4, wherein the customer-based preview
2 processor displays preview images generated at a remote server.

1 8. (Original) The system of Claim 1, wherein the data acquisition processor
2 receives at least input from a video source.

1 9. (Original) The system of Claim 1, wherein the data acquisition processor
2 receives at least input from two dimensional printed material.

1 10. (Original) The system of Claim 1, wherein the data acquisition station further
2 has a compositing processor for combining image data from different source material.

1 11. (Original) The system of Claim 1, wherein the data acquisition station further
2 has a graphics database for storing image data to be added to image data provided by a
3 customer.

1 12. (Original) The system of Claim 1, wherein the data acquisition station further
2 has a digitizer for providing image data from source material provided by a customer.

1 13. (Original) The system of Claim 1, further comprising a replicating station for
2 producing hologram copies from the master hologram.

1 14. (Original) The system of Claim 1, wherein the image processing station and
2 printing station are geographically remote and in data communication.

1 15. (Original) The system of Claim 1, wherein the data acquisition processor
2 delivers 2D sequence data to the image processor.

1 16. (Original) The system of Claim 1, wherein the data acquisition processor
2 delivers computer generated 3D graphics data to the image processor.

1 17. (Currently Amended) A method for producing holographic stereograms
2 (holograms) on-demand for an individual customer, from customer-provided source
3 material, comprising the steps of:
4 acquiring image data at a data acquisition station having a data acquisition
5 processor that receives image data based on the source material and a
6 customer-based preview processor that displays a representation of the
7 hologram for viewing by the customer, wherein the data acquisition
8 station is a personal computer;
9 delivering the image data to an image processing station having an image
10 processor operable to generate hogel data based on image data received
11 from the data acquisition station; and
12 delivering the hogel data to a printing station having a spatial light modulator for
13 receiving the hogel data from the image processor and for displaying
14 holographic object images, and having a printer for producing a master
15 holographic stereogram, wherein data acquisition station is in data
16 communication with the image processing station and the printing station,
17 and wherein the data communication is accomplished via the Internet.

1 18. (Original) The method of Claim 17, wherein the data acquisition station is
2 remote from the image processing station and the printing station.

1 19. (Original) The method of Claim 17, wherein the image processing station
2 also has an operator-based preview processor operable to display a representation of the
3 hologram for viewing by an operator of the image processor.

1 20. (Cancelled)

1 21. (Cancelled)

1 22. (Currently Amended) The method of Claim ~~20~~ 17, wherein the data
2 acquisition processor and the customer-based preview processor execute with
3 programming downloaded to the personal computer.

1 23. (Currently Amended) The method of Claim ~~20~~ 17, wherein the customer-
2 based preview processor displays preview images downloaded from a server.

1 24. (Original) The method of Claim 17, wherein the data acquisition processor
2 receives at least input from a video source.

1 25. (Original) The method of Claim 17, wherein the data acquisition processor
2 receives at least input from two dimensional printed material.

1 26. (Original) The method of Claim 17, further comprising the step of
2 compositing image data from different source material.

1 27. (Original) The method of Claim 26, wherein the compositing occurs at the
2 data acquisition station.

1 28. (Original) The method of Claim 26, wherein the compositing occurs at a
2 server site, such that the pre-view processor displays composited preview images
3 downloaded from the server site.

1 29. (Original) The method of Claim 17, wherein the image processing station
2 and printing station are geographically remote and in data communication.

1 30. (Original) The method of Claim 17, wherein the data acquisition processor
2 delivers 2D sequence data to the image processor.

- 1 31. (Original) The method of Claim 17, wherein the data acquisition processor
2 delivers computer generated 3D graphics data to the image processor.